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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/820,981  | 04/08/2004  | Xue Wang             | IR 3735 (EAN-11US)  | 9034             |
| 7590 01/20/2006   |             |                      | EXAMINER            |                  |
| ARKEMA INC.<br>Steven Boyd, Esquire<br>2000 Market Street<br>Philadelphia, PA 19103 |             |                      | LANGEL, WAYNE A     |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1754                |                  |
| DATE MAILED: 01/20/2006   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/820,981

Applicant(s)

WANG ET AL.

Examiner

Wayne Langel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-22, 26-31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feasy et al (of record). Feasy et al disclose hydrogen peroxide solutions which are stabilized with a phosphonic acid chelating agent (see the Abstract and col. 2, lines 29-48), and teaches in the Abstract and the paragraph bridging columns 4 and 5 that the phosphonic acid stabilizer can be employed in combination with other stabilizers such as stannates and salicylic acid. Feasy et al teach at col. 4, lines 13-23 that the solutions may be used in alkaline solutions for metal extraction. The hydrogen peroxide solution of Feasy et al would have a pH above 7 when used in alkaline solutions for metal extraction. The differences between the composition disclosed by Feasy et al, and that recited in applicants' claims, is that Feasy et al do not disclose that the composition should comprise about 0.3 wt% to about 15 wt% of hydrogen peroxide, or that the composition should have the specific amounts of stabilizers as recited in applicants' claim 1. It would be prima facie obvious to employ the specific amounts of the stabilizers as recited in applicants' claim 1 in the composition of Feasy et al, since it would be within the skill of one of ordinary skill in the art to determine a suitable or optimum amount of the respective stabilizers. It would be further obvious to employ the hydrogen peroxide at a concentration of about 0.3 wt% to about 15 wt% in the composition of Feasy et al, since the higher concentrations of

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hydrogen peroxide solutions disclosed at col. 4, lines 3-12 of Feasy et al would be diluted to 15 wt% or less when employed in an alkaline solution for metal extraction.

Claims 23-25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feasy et al as applied to claims 1-22, 26-31 and 33 above, and further in view of Sugihara et al. It would be further obvious from Sugihara et al to employ the composition of Feasy et al for cleaning a surface, since Sugihara et al disclose in the Abstract that basic solutions of hydrogen peroxide are useful for cleaning a semiconductor surface, and Feasy et al teach at col. 4, lines 13-23 that the stabilized solutions of the invention can be used for a very wide variety of different types of uses, after any necessary dilution and/or pH adjustment.

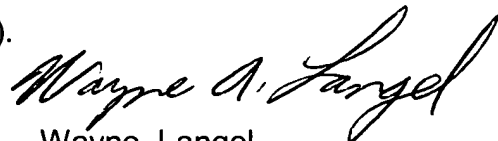
Applicants' argument, that the data in the present application shows that hydrogen peroxide stability at alkaline pHs is only provided by the three component stabilizer system claimed in the present application, is not convincing, since Feasy et al disclose at col. 5, lines 17-20 that the co-stabilizers often demonstrate synergy.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Langel whose telephone number is 571-272-1353. The examiner can normally be reached on Monday through Friday, 8 am - 3:30 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Wayne A. Langel". The signature is fluid and cursive, with the first name "Wayne" and last name "Langel" clearly legible.

Wayne Langel  
Primary Examiner  
Art Unit 1754

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